



# Solar Problem

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- Solar Not Competitive, Esp. US, Where Electricity Alternative
  - \* Present Course/Speed Consistent 1999 Roadmap-2020
  
- Issue is Cost & Efficiency
  - \* Base Material Cost
  - \* Packaging Cost
  - \* Manufacturing Costs
  - \* Installation Costs
  - \* Portability/Flexibility of Solutions

# Solar Solution

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- 3rd Generation Solar Cells
  
- SolarAMP Is Leader In This Solution
  - \* 3rd Generation Organic Nanotech Solution
  - \* Low Active PV Material Cost
    - “Pennies Per Square Meter”
  - \* Can Be Integrated Into Building Materials
    - Thin, Flexible, “Transparent”
  - \* Simple Manufacturing Process
    - Target- Match non-PV Package, ie. Windows

# SolarAMP Mission & Requirements

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## ■ Mission

- Commercialize Proprietary LARtec Solution(Light Absorbing Rod Technology) Through Partnerships with Key Segment Leaders

## ■ Objectives For NREL Conference

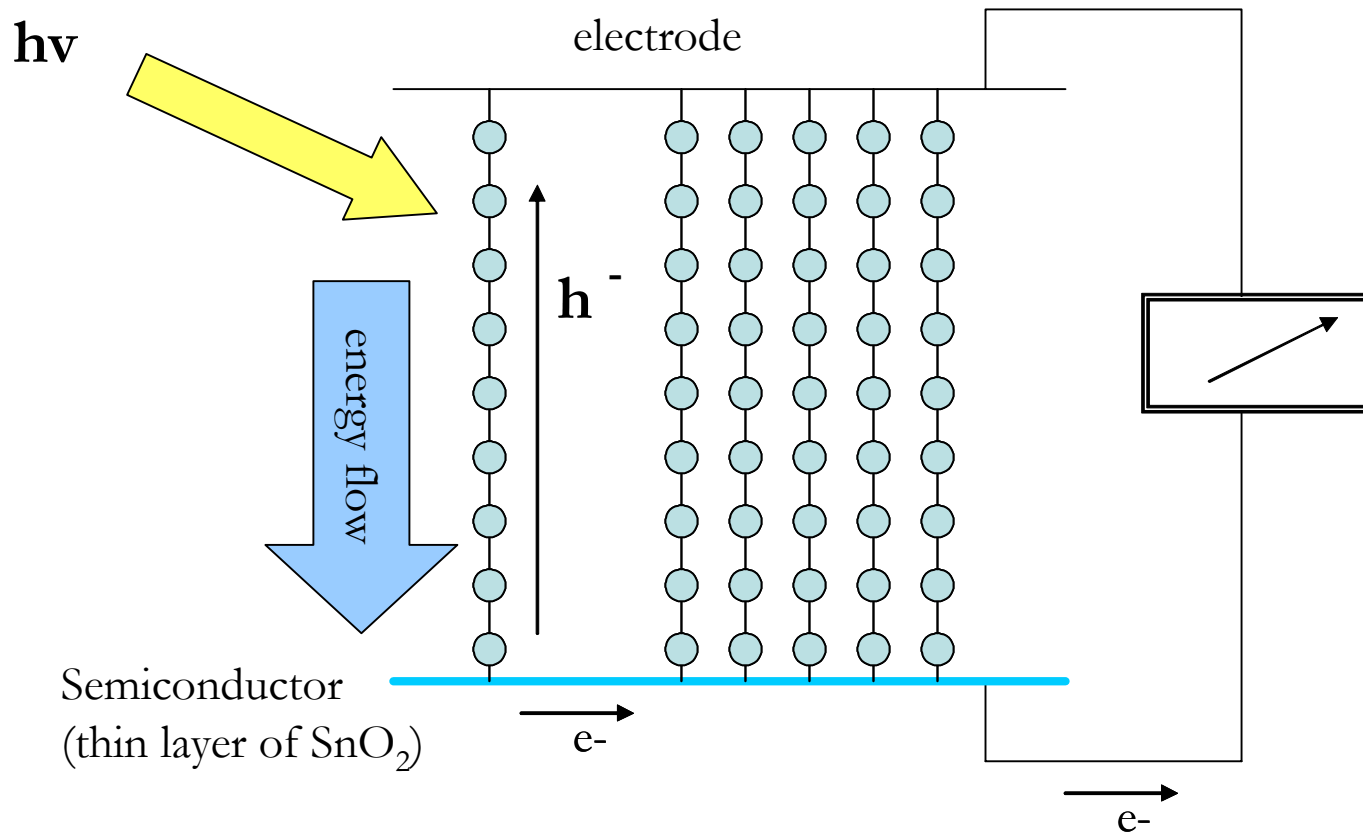
- Initiate Contacts for Commercialization Round
- Identify Partners with Complimentary Skills and Capabilities

# The LARtec Solution

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- Dye Sensitized Nanotechnology PV Solution
- Uniqueness
  - Single Organic Material for Light Absorbtion and Exiton/Hole Transfer
  - Longer Lived and Directed Exitons
  - Engineered Molecular Structure For Photosynthesis Emulation
- Result
  - Lower Cost/Higher Potential Efficiency than Competing Known Nanotech Solutions
- Position Supported By Large Body of IP/ Leading Experts Enhancing the Position
- Key Customers-Traditional/Non-Traditional Solar Suppliers
  - Specific Application Focus with Manufacturing/Distribution
  - Early Focus on Building Integrated PV Solution Providers

# The LARTEC Solution

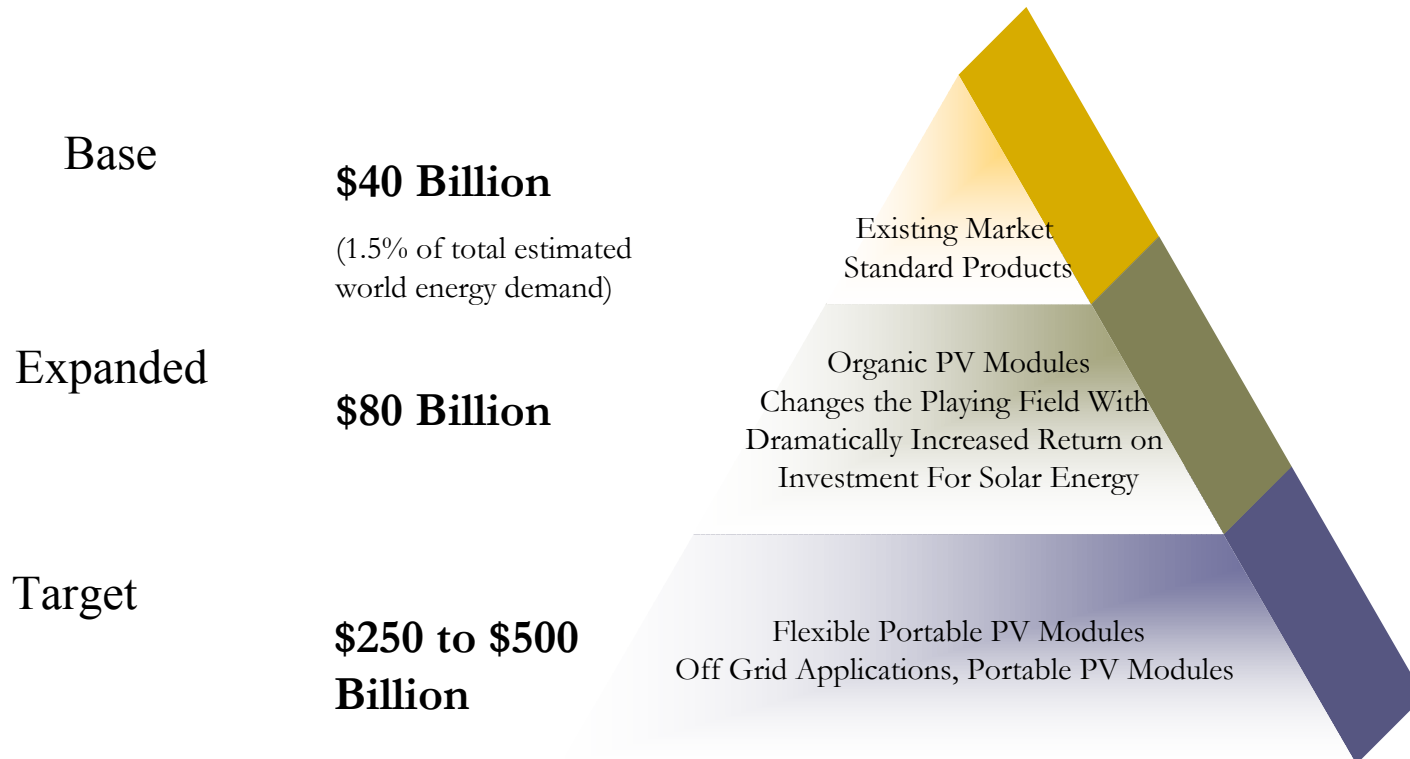


# SolarAMP Business Model

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- SolarAmp is a Commercialization Company
  - Drive Industry Leading Technology R&D
    - \* Target- Photosynthesis (25-35% Efficiency)
  - Protected Intellectual Property
    - \* 5 Issued Patents, 12 Filed Disclosures/Extensions
  - Experience & Ability to Partner for Commercialization
  
- Go To Market With Partners Where:
  - Specific Manufacturing & Channel Expertise Exists
  - Opportunity Leverages LARtec Solution Values
  - Early Access Where Low Cost 10% Efficient Solution Has High Value

# Solar/SolarAMP Opportunity - 2013



## Industry and Competitive Keys

- Solar Must Expand Through 2nd/3rd Generation “Film” Solutions
- Early a-Si, CdTe, CIS Solutions Need to Prove Low Cost Solar
- Early Nanotech Needs Success, ie Konarka
- SolarAMP Needs Differentiate re:Nano Solutions, ie NanoSys/NanoSolar



# SolarAMP Team

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- William Conklin-Managing Principal
  - Large Company Expertise, “Startup” Business/Markets
- Dr. Jonathan Lindsey- Lead Technical Principal
  - World Recognized Leader Synthetic Chemistry
  - Leads Base Technology Activities
  - Zettacore Founder
- Dr. Gregory Parsons-Lead Packaging Activities
  - Chemical Engineer- Focus is Surface Technologies
- Other Key People(total 11, including contractors)
  - Dr. David Bocian-Charge Migration
  - Dr. Dewey Holton-Light Gathering
  - Dr. Gerald Meyers-Solar Cell Fabrication

# Financial

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## ■ Investment

- To Date \$1.05M Raised
  - \* Burn Rate \$350K/Year
- Require \$5M to Commercialize 1st Product & Drive Technology
  - \* \$2M Initial, \$1.5M/year Two Years

## ■ Uses of Funds

- To Date 90%+ Sponsored Research & IP
- Additional
  - \* \$2.5M to Drive 1st Product With Partner
  - \* \$2M Base Technology
  - \* \$.5M to Initiate 2nd Product Partnership

## ■ Self Sufficient 2007

# Achievements

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- Company Formed 2000
  - Completed “Thick Liquid” Prototype-4%
  - Initial Disclosures Filed
  
- Operational 2001
  - Initial Funding & Exclusive LARtec Solution License
  
- Key 2002 Achievements
  - BP Teaming Relationship-Plan for Early Solid State Solution
  - Issuance of Key Patents
  
- 2003/2004
  - Completion of Key Checkpoints for 5% Solid State Cell
  - Base Technology for 10% Commercial Product
  
- Next Steps
  - Complete Commercial Sample Plan
    - \* Initial Target 5% Architectural Glass Solution
  - Initiate Commercialization Funding Round
  - Close with Early Commercialization Partners

# Summary

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- 3rd Generation Key to Solar Competitiveness
- SolarAMP Has Leading 3rd Generation Technology
- Early Commercialization Opportunities Exist
- Look To Close Relationships 1Q2005
  - Financial
  - Early Commercial Solution Relationship
- Want To Discuss Further At Your Convenience